

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P165339

Luminaire Tested: **VST-E12-LED-E-U-SL3-HSS-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165339
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E12-LED-E-U-SL3-HSS-7060
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (252) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21093.9 lumens
Efficiency: N/A
Efficacy: 72.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 291.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



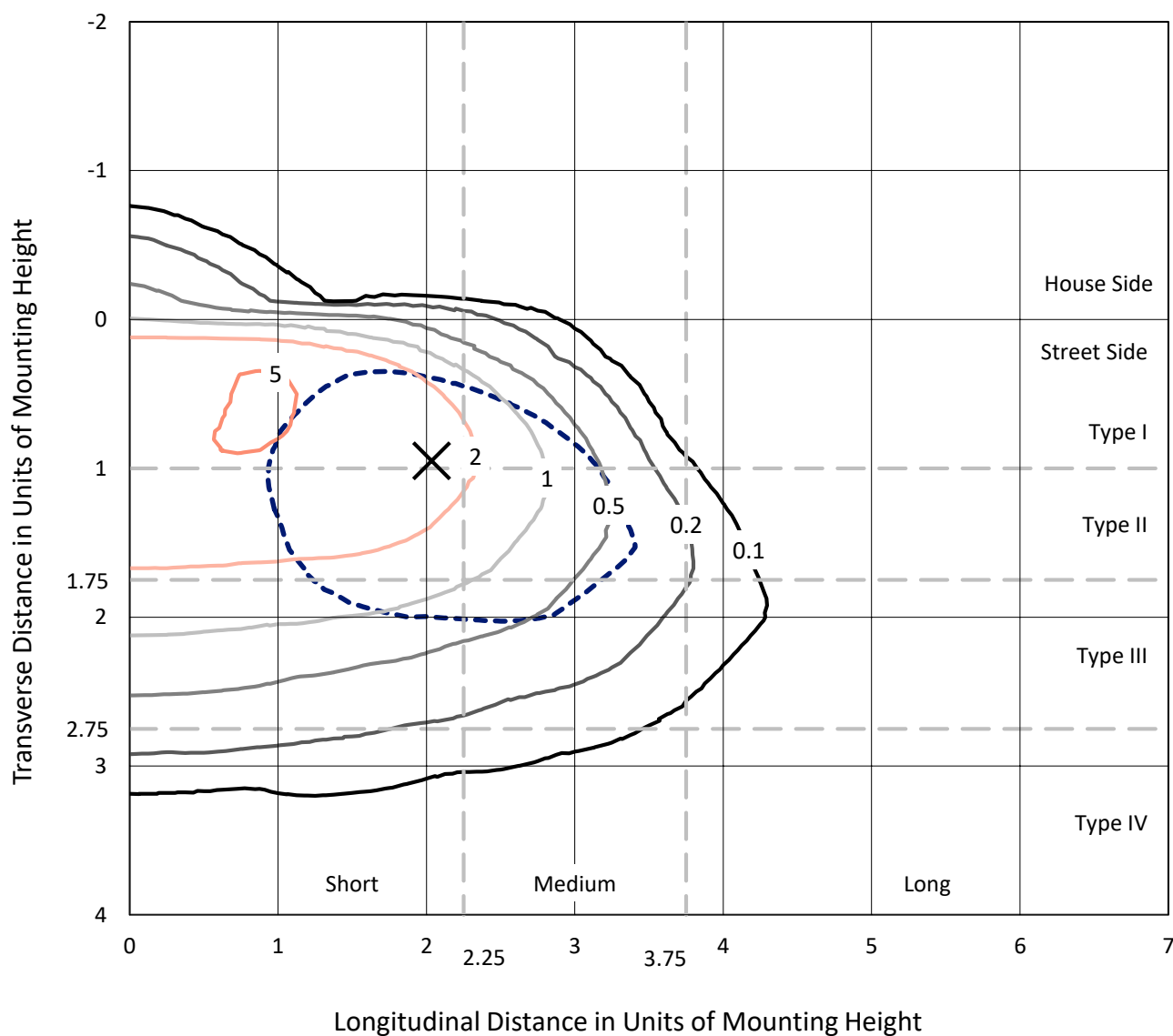
REPORT NUMBER: P165339

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-7060

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

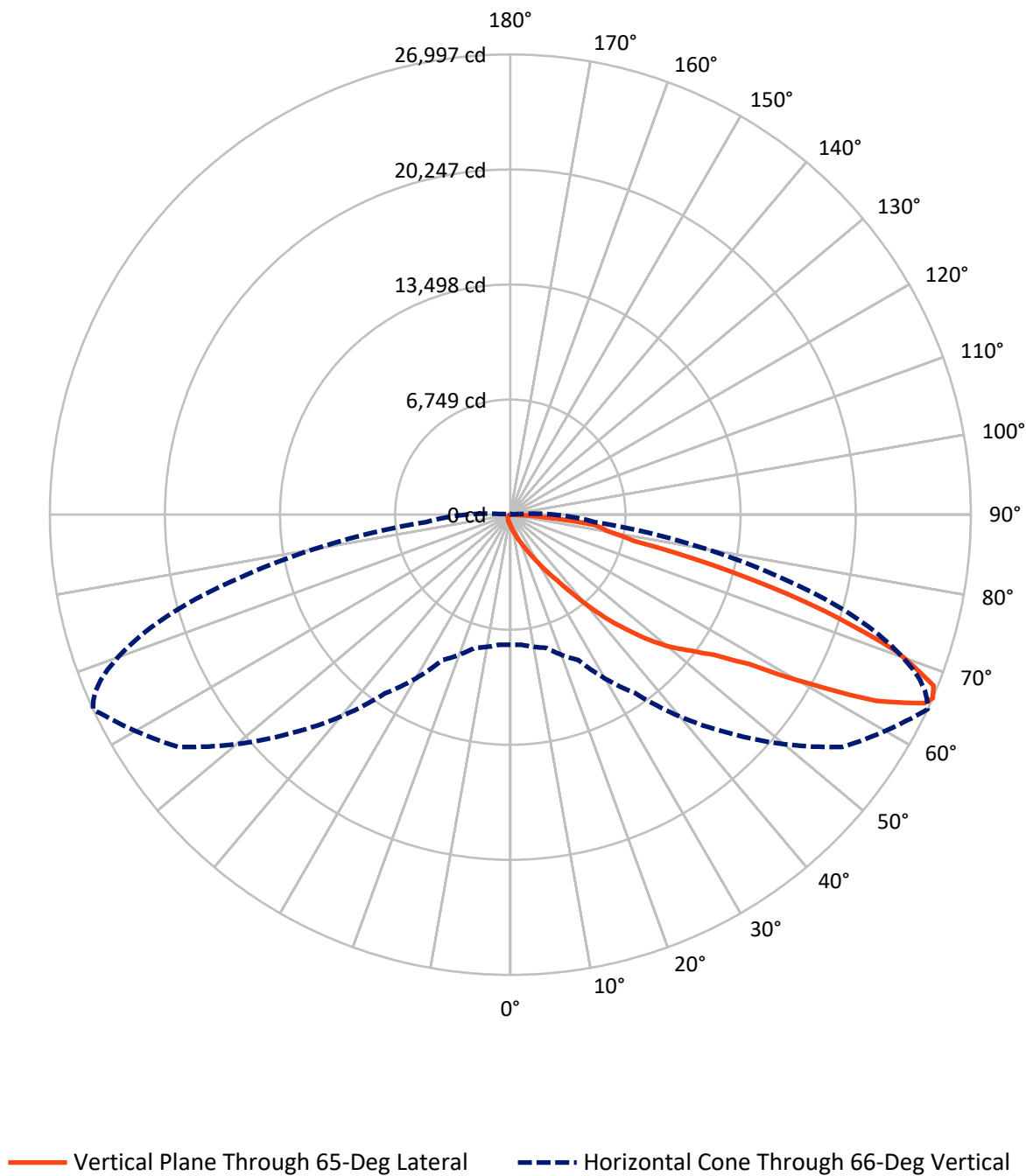


Based on 25 foot mounting height. Maximum calculated value = 5.6 fc
Type III - Short - Non-Cutoff

REPORT NUMBER: P165339

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-7060

Luminous Intensity Polar Plot



REPORT NUMBER: P165339

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-7060

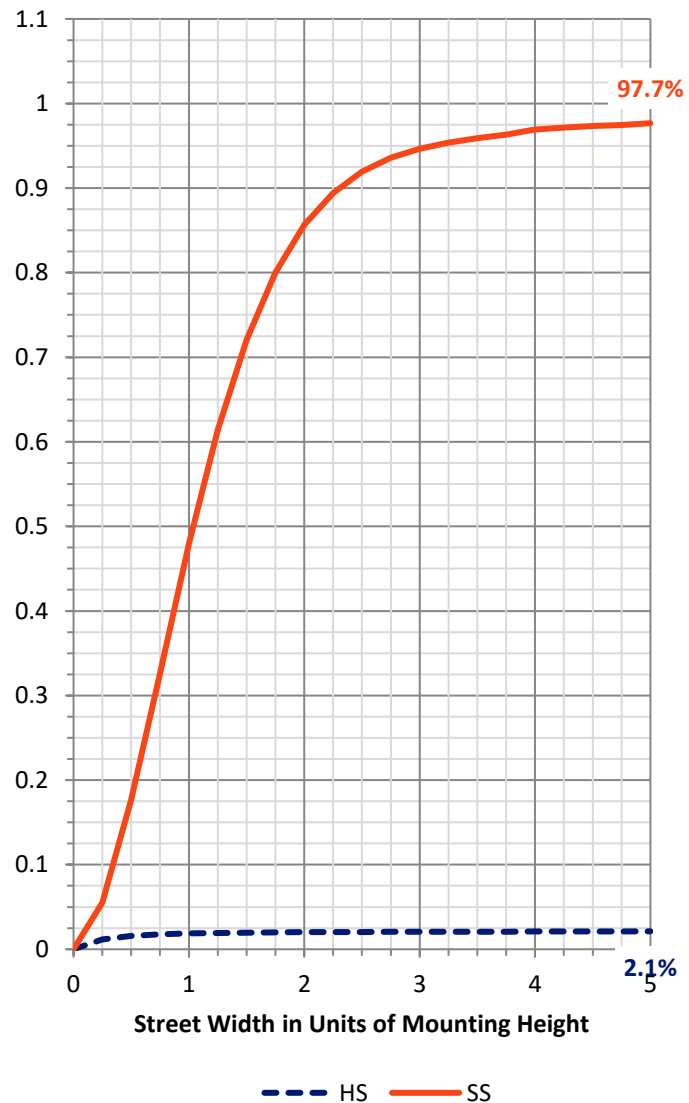
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	457.1	0.0	457.1
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	20636.8	0.0	20636.8
	% Fixture	97.8	0.0	97.8
Total	Lumens	21093.9	0.0	21093.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.3	0.3
10°-20°	302.2	1.4
20°-30°	651.8	3.1
30°-40°	1392.0	6.6
40°-50°	3078.4	14.6
50°-60°	5216.9	24.7
60°-70°	6961.5	33.0
70°-80°	3066.5	14.5
80°-90°	353.2	1.7
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	21093.9	100.0
0°-180°	21093.9	100.0

Coefficient of Utilization



REPORT NUMBER: P165339

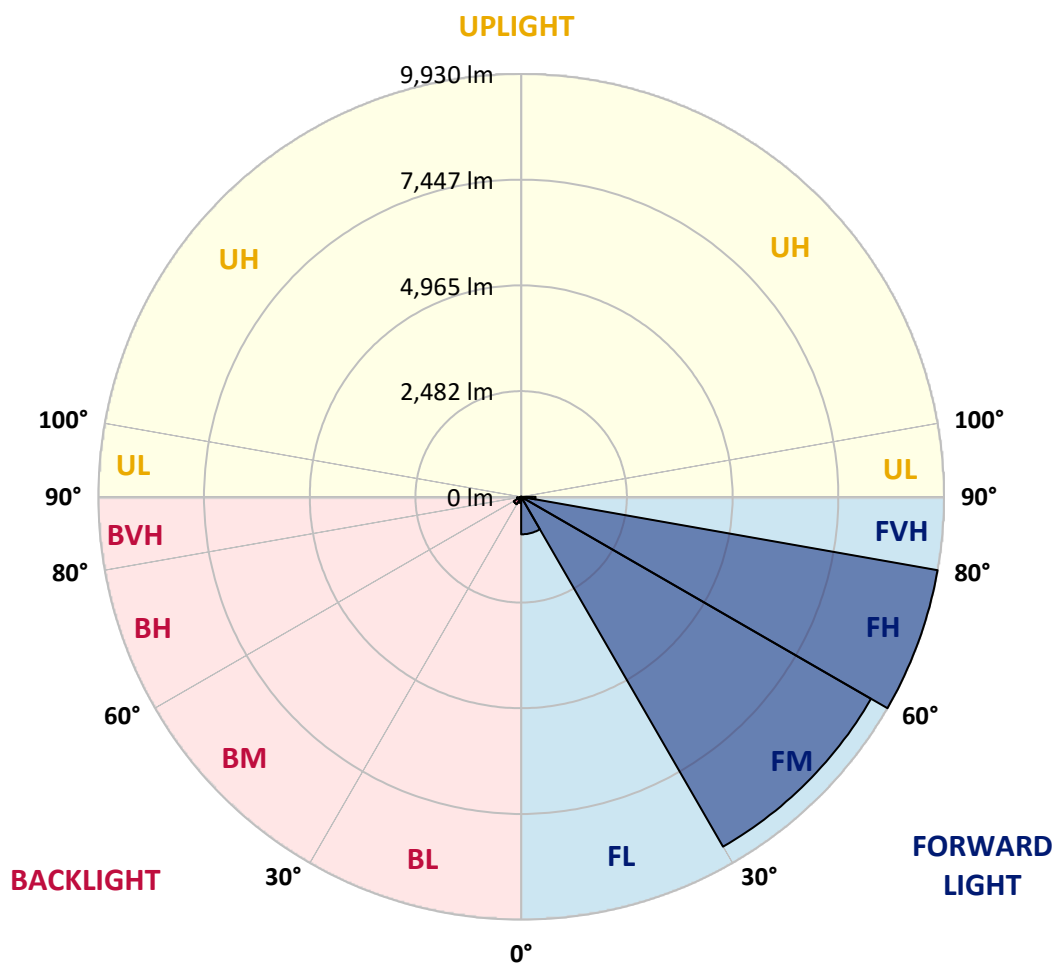
CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-7060

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	881.1	4.2			
FM	(30°-60°)	9486.6	45.0			
FH	(60°-80°)	9929.9	47.1			G4/12000
FVH	(80°-90°)	339.1	1.6			G3/500
BL	(0°-30°)	144.2	0.7	B1/500		
BM	(30°-60°)	200.7	1.0	B0/220		
BH	(60°-80°)	98.1	0.5	B0/110		G0/110
BVH	(80°-90°)	14.1	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type III Short





REPORT NUMBER: P165339

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-7060

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6
2.5°	803.1	798.9	782.6	782.6	758.3	742.2	721.8	701.6	701.6	697.4	693.5
5°	1062.4	1038.3	1034.1	989.5	953.0	900.3	851.6	786.8	778.7	770.6	766.4
7.5°	1350.5	1346.3	1309.9	1257.2	1184.3	1086.8	989.5	884.1	867.8	859.7	843.5
10°	1723.6	1703.2	1654.7	1565.3	1455.9	1326.1	1168.0	1001.6	981.4	965.1	957.0
12.5°	2080.4	2044.0	2015.4	1901.9	1764.0	1573.4	1382.8	1143.7	1127.4	1107.2	1074.7
15°	2412.9	2380.4	2331.9	2234.6	2080.4	1841.1	1618.2	1326.1	1285.5	1257.2	1232.8
17.5°	2672.5	2652.3	2595.4	2486.0	2319.6	2108.8	1841.1	1512.6	1480.3	1443.6	1399.0
20°	2920.0	2891.4	2802.3	2652.3	2473.7	2311.4	2104.8	1755.9	1711.3	1666.7	1618.2
22.5°	3155.2	3126.6	2980.8	2733.3	2542.7	2473.7	2400.8	2031.7	1962.7	1926.3	1877.5
25°	3483.7	3422.8	3195.5	2802.3	2546.9	2599.6	2725.2	2388.5	2323.8	2271.1	2194.0
27.5°	3925.7	3844.4	3487.6	2903.7	2562.9	2737.5	3098.3	2822.4	2753.5	2692.7	2607.7
30°	4424.4	4371.7	3945.9	3147.0	2680.6	2940.2	3515.9	3374.1	3293.1	3219.9	3118.7
32.5°	4927.3	4854.4	4432.5	3609.3	2996.8	3333.4	4039.2	4014.9	3909.5	3840.5	3730.9
35°	5369.3	5332.9	5020.6	4367.5	3718.9	4023.0	4736.7	4765.0	4671.9	4598.8	4477.1
37.5°	5669.5	5669.5	5608.7	5182.7	4866.4	5093.5	5762.6	5766.8	5673.5	5507.2	5446.4
40°	5823.4	5868.0	6087.2	6168.2	6152.0	6444.0	7109.2	7036.0	6959.0	6873.8	6671.1
42.5°	6139.9	6180.3	6646.7	7206.5	7571.4	7956.6	8414.9	8390.5	8297.4	8143.3	7956.6
45°	6675.3	6728.0	7283.5	8171.6	8921.7	9469.4	9761.2	9647.7	9554.4	9408.6	9311.0
47.5°	7356.4	7457.9	8086.4	9185.4	10089.7	10994.0	11298.2	10998.2	10917.2	10803.4	10645.3
50°	8082.4	8179.7	8848.8	10106.0	11128.0	12206.6	12713.7	12206.6	12089.2	12052.5	11874.2
52.5°	8710.9	8792.2	9436.9	10815.7	11922.7	13188.0	13926.1	13257.0	13171.7	13050.1	12920.3
55°	9084.0	9149.0	9753.1	11156.3	12462.3	14072.1	15098.3	14510.2	14384.4	14335.8	14149.2
57.5°	9209.8	9274.6	9818.1	11200.9	12754.1	14879.1	16521.7	16541.9	16391.9	16217.6	16160.7
60°	9209.8	9282.7	9741.0	11091.5	13038.0	15738.8	18419.4	20110.5	19786.2	19753.7	19546.8
62.5°	8828.6	8897.6	9359.8	10754.9	13419.2	16898.7	21063.6	24048.3	23955.2	23744.2	23403.6
65°	8001.2	8041.8	8495.9	9895.2	13273.2	17965.3	23354.8	26668.1	26518.1	26104.4	25666.5
66°	7628.1	7660.6	8086.4	9404.4	12794.7	18111.3	23760.4	26996.6	26749.3	26400.4	25905.6
67.5°	7088.7	7145.6	7445.6	8492.0	11647.1	17604.3	23505.0	26765.6	26550.6	26128.7	25634.0
70°	4732.7	4692.1	5750.5	6516.9	8873.2	14344.0	21087.9	24032.0	24036.2	23837.5	23638.8
72.5°	2246.7	2271.1	2579.1	4010.7	5807.2	9582.9	16785.2	19181.9	19457.7	19100.8	18853.3
75°	1614.0	1650.5	1837.1	2453.5	3463.2	5750.5	10880.5	13415.1	13423.2	12790.5	12227.1
77.5°	470.4	490.8	689.3	1512.6	2595.4	3880.9	6249.2	7457.9	7283.5	6829.2	6403.4
80°	194.5	194.5	202.7	482.7	1042.2	2636.0	4371.7	5742.4	5722.2	5547.9	5296.4
82.5°	72.9	77.1	97.3	198.7	247.5	648.9	2915.8	4984.2	4971.9	4724.6	4546.1
85°	8.1	8.1	24.4	85.2	93.3	121.7	583.9	2197.9	2185.9	2197.9	1926.3
87.5°	0.0	0.0	3.9	8.1	12.1	16.3	24.4	85.2	93.3	89.1	81.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P165339

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-7060

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6
2.5°	693.5	685.4	685.4	681.4	681.4	681.4	677.2	673.3	673.3	669.1	665.2
5°	758.3	750.1	746.2	738.1	734.1	729.9	721.8	717.9	709.7	705.6	701.6
7.5°	835.3	819.1	815.1	803.1	790.8	782.6	774.5	762.4	754.3	738.1	734.1
10°	932.9	912.4	896.2	879.9	867.8	847.6	835.3	819.1	803.1	790.8	778.7
12.5°	1058.4	1030.1	1005.7	989.5	961.2	936.8	912.4	900.3	867.8	851.6	831.4
15°	1196.4	1163.8	1135.5	1103.0	1082.8	1042.2	1009.7	973.2	957.0	928.7	896.2
17.5°	1374.7	1322.0	1277.4	1245.1	1204.5	1163.8	1127.4	1091.0	1042.2	1009.7	969.3
20°	1565.3	1520.7	1459.9	1403.2	1354.5	1305.9	1253.0	1204.5	1159.9	1107.2	1058.4
22.5°	1808.8	1743.8	1670.9	1614.0	1549.3	1496.6	1423.4	1358.6	1285.5	1216.6	1159.9
25°	2116.9	2031.7	1962.7	1881.7	1804.6	1723.6	1634.2	1553.2	1459.9	1395.1	1297.8
27.5°	2498.1	2417.1	2323.8	2218.4	2141.3	2019.6	1901.9	1800.7	1691.1	1589.6	1480.3
30°	2984.7	2867.3	2769.7	2668.5	2514.4	2396.7	2258.7	2121.1	1970.9	1869.6	1703.2
32.5°	3568.6	3443.0	3297.0	3151.0	3009.1	2842.9	2672.5	2502.1	2335.8	2149.4	1979.0
35°	4282.6	4132.3	3966.1	3808.0	3589.1	3410.5	3195.5	2960.4	2773.9	2558.9	2344.0
37.5°	5227.5	4980.0	4833.9	4667.7	4371.7	4128.4	3889.0	3653.8	3325.3	3098.3	2794.1
40°	6411.5	6265.5	6026.4	5758.7	5491.0	5170.6	4846.3	4534.0	4152.8	3836.3	3483.7
42.5°	7802.4	7587.7	7344.4	6959.0	6687.3	6310.1	5941.2	5527.4	5061.0	4655.6	4241.9
45°	9108.4	8853.0	8666.3	8281.2	7997.2	7551.0	7105.0	6667.1	6127.6	5604.5	5126.0
47.5°	10519.7	10308.7	10000.6	9688.3	9400.4	8897.6	8414.9	7883.7	7315.8	6695.5	6074.9
50°	11760.6	11594.4	11383.4	11006.3	10685.9	10264.1	9696.5	9116.5	8398.6	7782.2	7076.7
52.5°	12814.9	12685.1	12389.1	12121.4	11833.5	11436.1	10929.3	10373.7	9599.2	8921.7	8118.9
55°	14060.0	13966.7	13707.1	13540.9	13285.5	12904.3	12429.7	11914.8	11095.5	10357.4	9449.0
57.5°	16099.8	16026.9	15799.6	15730.7	15479.3	15146.8	14562.9	14011.3	13054.3	12137.7	11099.7
60°	19477.9	19332.1	18999.4	18829.2	18297.8	17851.8	17093.5	16335.0	15179.3	14011.3	12762.2
62.5°	23095.3	22685.7	22053.1	21509.8	20755.5	19980.7	18966.9	17807.2	16452.7	15065.8	13630.0
65°	25045.9	24348.5	23549.6	22685.7	21708.5	20568.8	19291.4	17900.5	16444.6	14980.6	13463.8
66°	25269.0	24482.2	23634.8	22673.6	21586.9	20374.3	19076.4	17616.6	16103.8	14676.4	13159.7
67.5°	24989.3	24166.0	23269.9	22203.3	21027.1	19769.9	18407.3	16890.6	15434.7	13986.9	12510.8
70°	23030.5	22211.2	21412.3	20289.1	19035.8	17770.8	16481.1	14786.0	13407.2	12076.9	10763.0
72.5°	18391.1	17835.5	17044.8	16083.6	14862.9	13378.6	12303.9	10787.4	9591.0	8301.4	7283.5
75°	11493.0	10710.3	9732.9	8508.2	7575.4	6370.9	5742.4	4590.6	3909.5	3313.3	2737.5
77.5°	5876.1	5288.3	4602.9	3913.4	3252.4	2595.4	2007.3	1419.5	957.0	665.2	494.7
80°	4854.4	4335.3	3767.4	3138.9	2555.0	1983.2	1427.6	973.2	620.6	405.6	316.2
82.5°	4010.7	3572.8	3065.8	2481.9	1975.0	1557.4	1082.8	705.6	437.9	283.9	223.1
85°	1707.4	1549.3	1196.4	948.9	713.7	527.3	369.2	247.5	174.4	141.8	129.8
87.5°	72.9	81.0	77.1	60.8	44.6	44.6	40.6	32.5	32.5	32.5	32.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P165339

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-7060

CANDELA DISTRIBUTION (continued):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6	636.6
2.5°	665.2	661.0	657.0	657.0	652.8	648.9	624.5	604.3	580.0	563.7	547.4
5°	693.5	689.3	681.4	677.2	669.1	665.2	612.5	567.6	531.2	502.9	482.7
7.5°	721.8	717.9	705.6	693.5	689.3	681.4	596.2	539.3	490.8	458.3	437.9
10°	758.3	746.2	734.1	717.9	705.6	693.5	580.0	506.8	454.1	425.8	405.6
12.5°	811.0	790.8	770.6	750.1	734.1	713.7	571.8	478.5	425.8	393.3	373.1
15°	872.0	843.5	819.1	794.9	766.4	746.2	555.6	454.1	401.4	369.2	344.8
17.5°	928.7	896.2	859.7	823.3	794.9	766.4	539.3	430.0	377.0	344.8	320.4
20°	1009.7	961.2	916.6	872.0	831.4	794.9	514.9	405.6	356.8	320.4	296.0
22.5°	1099.1	1042.2	985.6	924.7	872.0	823.3	494.7	385.2	336.6	300.2	271.6
25°	1212.6	1143.7	1066.6	989.5	928.7	863.9	474.6	365.0	316.2	279.8	251.4
27.5°	1370.7	1273.4	1188.2	1091.0	997.6	924.7	458.3	348.7	296.0	259.6	231.2
30°	1585.7	1443.6	1309.9	1204.5	1094.9	989.5	442.0	328.5	279.8	239.4	206.9
32.5°	1824.8	1658.6	1504.4	1346.3	1208.4	1086.8	425.8	312.3	259.6	218.9	190.6
35°	2121.1	1910.0	1703.2	1520.7	1354.5	1192.2	409.5	296.0	243.3	198.7	170.4
37.5°	2546.9	2283.1	2011.5	1776.3	1561.3	1346.3	397.5	279.8	223.1	178.5	150.0
40°	3130.8	2790.2	2457.5	2137.1	1857.3	1589.6	381.2	263.5	206.9	162.3	133.7
42.5°	3763.4	3349.7	2911.8	2550.8	2165.7	1829.0	365.0	247.5	190.6	146.0	117.7
45°	4550.2	4035.1	3503.9	3013.1	2542.7	2108.8	348.7	231.2	170.4	129.8	101.5
47.5°	5410.0	4752.9	4152.8	3536.4	2976.6	2457.5	328.5	218.9	154.2	113.5	89.1
50°	6294.0	5600.6	4842.1	4140.5	3475.5	2806.4	308.3	198.7	137.9	101.5	72.9
52.5°	7246.8	6427.8	5653.3	4781.2	4006.7	3264.5	287.9	182.5	125.6	89.1	60.8
55°	8459.5	7543.1	6634.6	5657.2	4724.6	3795.9	267.7	162.3	109.6	77.1	48.8
57.5°	9984.3	8897.6	7782.2	6679.2	5547.9	4493.4	251.4	141.8	93.3	64.8	40.6
60°	11424.0	10154.7	8804.2	7535.0	6257.4	5028.7	227.1	125.6	81.0	52.7	40.6
62.5°	12170.2	10722.4	9266.5	7867.4	6504.9	5219.3	202.7	105.4	69.0	44.6	36.4
65°	11987.7	10511.6	9100.2	7688.9	6354.9	5097.7	178.5	93.3	60.8	40.6	36.4
66°	11724.2	10264.1	8844.9	7502.5	6229.0	4967.9	166.2	89.1	56.9	40.6	32.5
67.5°	11148.2	9736.8	8382.4	7133.3	5884.3	4720.4	150.0	81.0	52.7	36.4	32.5
70°	9522.1	8240.5	7157.7	6046.6	5028.7	3978.4	121.7	69.0	44.6	32.5	32.5
72.5°	6301.9	5430.2	4708.3	4051.3	3386.1	2627.9	101.5	56.9	36.4	32.5	28.3
75°	2376.5	2149.4	1845.3	1658.6	1447.8	1269.3	81.0	36.4	28.3	28.3	28.3
77.5°	421.9	389.3	344.8	316.2	292.1	267.7	64.8	24.4	24.4	28.3	28.3
80°	283.9	263.5	239.4	218.9	202.7	182.5	44.6	20.2	24.4	24.4	28.3
82.5°	202.7	190.6	178.5	162.3	150.0	133.7	28.3	20.2	24.4	24.4	24.4
85°	121.7	113.5	105.4	97.3	85.2	81.0	20.2	20.2	20.2	24.4	24.4
87.5°	32.5	28.3	32.5	32.5	24.4	28.3	16.3	16.3	16.3	20.2	20.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P165339

CATALOG NUMBER: VST-E12-LED-E-U-SL3-HSS-7060

CANDELA DISTRIBUTION (continued):

	145°	155°	165°	175°	180°
0°	636.6	636.6	636.6	636.6	636.6
2.5°	539.3	539.3	531.2	543.5	543.5
5°	466.4	466.4	462.2	466.4	466.4
7.5°	425.8	421.9	421.9	421.9	425.8
10°	389.3	385.2	385.2	385.2	385.2
12.5°	356.8	352.9	348.7	352.9	352.9
15°	328.5	320.4	320.4	320.4	320.4
17.5°	304.1	296.0	292.1	292.1	292.1
20°	279.8	267.7	267.7	267.7	267.7
22.5°	255.4	243.3	243.3	243.3	243.3
25°	231.2	218.9	218.9	218.9	218.9
27.5°	210.8	198.7	198.7	198.7	198.7
30°	186.7	178.5	178.5	182.5	178.5
32.5°	170.4	158.1	158.1	162.3	162.3
35°	150.0	141.8	141.8	141.8	141.8
37.5°	129.8	121.7	121.7	121.7	121.7
40°	113.5	105.4	101.5	105.4	105.4
42.5°	97.3	89.1	85.2	85.2	85.2
45°	85.2	72.9	69.0	72.9	72.9
47.5°	69.0	60.8	60.8	64.8	64.8
50°	52.7	52.7	56.9	64.8	64.8
52.5°	48.8	48.8	56.9	64.8	64.8
55°	44.6	48.8	56.9	60.8	64.8
57.5°	40.6	48.8	56.9	60.8	60.8
60°	40.6	44.6	52.7	60.8	60.8
62.5°	36.4	40.6	48.8	56.9	56.9
65°	36.4	40.6	48.8	56.9	56.9
66°	36.4	40.6	48.8	56.9	56.9
67.5°	36.4	40.6	48.8	56.9	56.9
70°	36.4	40.6	48.8	52.7	52.7
72.5°	32.5	36.4	44.6	52.7	52.7
75°	32.5	36.4	44.6	52.7	52.7
77.5°	32.5	36.4	44.6	52.7	52.7
80°	32.5	36.4	44.6	48.8	52.7
82.5°	28.3	36.4	40.6	48.8	48.8
85°	28.3	32.5	40.6	44.6	48.8
87.5°	24.4	28.3	32.5	40.6	40.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)